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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,166	04/21/2004	Patrick French	2060-96	8136
22442	7590	08/22/2005	EXAMINER	
SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			ALLEN, ANDRE J	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/830,166	Applicant(s) FRENCH ET AL.	
	Examiner Andre J. Allen	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18, 25-30, 33-35 and 38-55 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 19, 21, 22, 31, 32, 36, 37, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 4, 7-14, 20, 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-21-04, 12-27-04, 6-7-05, 8-30-09</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 5,6,31,32,36,37,46,47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 103

2. following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obradovich et al (US 2003/0117297) in view of Heller et al (US 679940)

Regarding claim 1 Obradovich et al teaches a plurality of sensors [0125]; a controller for processing measurement information from the sensors; and memory for storing processed measurement information, wherein the sensors comprise: an anemometer for measuring wind speed; a rain gauge for measuring rainfall;; a barometric pressure sensor for measuring the barometric pressure; and an air temperature sensor for measuring the ambient air temperature (claim 4 page 16). Obradovich et al however does not teach a compass for determining the orientation of the weather station relative to the earth's magnetic field. Heller et al teaches a compass for determining the orientation of the weather station relative to the earth's magnetic field and a Global Positioning System receiver for determining a spatial location of the weather station (claim 4).

It would have been obvious to a person having ordinary skill in the art of weather evaluation systems at the time the invention was made to

modify the apparatus taught by Obradovich et al with a Global Positioning System receiver for determining a spatial location of the weather station and compass as taught by Heller et al for the purpose of transmitting and processing data related to temperature, wind altitude and other related weather data (Heller et al col. 2 lines 40-46)

Regarding claim 2 Obradovich et al teaches a humidity sensor for measuring humidity; a level for determining an orientation of the weather station relative to the earth's gravitational field; and a radiant temperature sensor for measuring radiant temperature [0127 and claim 4).

Regarding claim 3 Obradovich et al teaches a wireless modem for wirelessly receiving commands and transmitting measurement information [0008].

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19,21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill (US 5714691).

Regarding claims 19,21-22 Hill et al teaches first and second transducers positioned along a first axis; and third and fourth transducers positioned along a second axis, the first and second axes being at least substantially orthogonal, wherein each of the first, second, third, and fourth transducers are configured in a transmit mode to transmit a measurement signal and in a receive mode to receive the measurement signal, wherein the transducer are multiplexed together to send and receive signals separately (fig 1).

Allowable Subject Matter

3. Claims 4 and 7-14,20,23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claims 4,7-9,14,and 24 the cited prior art does not teach connection interfaces configured to connect interchangeably to any

of the other connection interfaces, the anemometer comprises: first and second transducers positioned along a first axis; and third and fourth transducers positioned along a second axis, the first and second axes being at least substantially orthogonal, wherein each of the first, second, third, and fourth transducers are configured in a transmit mode to transmit a measurement signal and in a receive mode to receive the measurement signal, a rain gauge having adjacent ends of first and second conduits are angled relative to a selected horizontal plane; and (ii) the second conduit comprises a longitudinal slot extending downwardly from the end of the second conduit, the sensor units are at least partially deactivated in a first operational mode and activated in a second operational mode.

Regarding claims 20 the cited prior art does not disclose nor suggest a controller operable (i) during a first time interval, to effect transmission of a first measurement signal from the first transducer to the second transducer; (ii) during a subsequent second time interval, to effect transmission of a second measurement signal from the second transducer to the first transducer; (iii) during a subsequent third time interval, to effect transmission of a third measurement signal from the third transducer to the fourth transducer; and (iv) during a subsequent fourth time interval, to effect transmission of a fourth measurement signal from the fourth transducer to the third transducer.

4. Claims 15-18, 25-29,30,33-55 is allowed.

The following is an examiner's statement of reasons for allowance: during a first time interval, transmitting a measurement signal from the first transducer and receiving the measurement signal at the second transducer; and during a subsequent second time interval, transmitting a measurement signal from second transducer and receiving the measurement signal at the first transducer; during a subsequent third time interval, transmitting a measurement signal from the third transducer and receiving the measurement signal at the fourth transducer; and during a subsequent fourth time interval, transmitting a measurement signal from the fourth transducer and receiving the measurement signal at the third transducer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André Allen
Patent Examiner
Art Unit 2855



MAX NOORI
PRIMARY EXAMINER

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